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WEEKLY STATION REPORTS

of the office of

DRY LAND AGRICULTURE INVESTIGATIONS

Bureau of Plant Industry

U. S. Department of Agriculture

August 4, 1917.

REPORT FOR WEEK ENDING JULY 28, 1917.

Akron:

The past week has been very dry and hot. Harvesting has been general over the county. Winter wheat is good in some localities in the county but as a rule is short but well filled. Winter wheat will be of good quality. Spring wheat is burning badly and will be shriveled. Oats are a light crop and barley is fair. Corn is rolling badly. We have only had one shower since the first of June that was of much value. Oats and barley varieties and on the rotations have been harvested during the week. Harvesting will probably be finished the first of next week. Maximum temperature: 98-22d, 24th, and 27th; minimum, 55-27th, precipitation, none.

Amarillo:

A week of almost uniform daily round of weather has prevailed. In temperature the range has been from a minimum of around 65 to a maximum of around 95 with wind mainly from the south, clear skies and a high rate of evaporation. Already since the rains of ten days ago crops have begun to suffer for lack of moisture. The supply of soil moisture in the case of most of the plats was confined to the two top feet of soil and this supply is now running low so that we shall have to have rain in the near future. The row crops on the station were cultivated the fourth time over during the week. Milo is beginning to head out. Corn averages around 3½ feet in height and to date has made good growth. Threshing on the station has not yet been commenced but is intended for our program next week. The drug and oil plants put in for Stockberger's office are doing no good. These were replanted July 7th, but less of the replanting showed up than was the case from the first planting. Sunflowers have made the best showing so far but some sorts of insects are now destroying the foliage of these.

Messrs. Chilcott and Clemmer of the Woodward station and Mr. Whelan from Washington are visitors at the station today. Weather for the week was: maximum temperature, 97-24th, minimum 64-25th, hourly wind 8.8 miles, precipitation, none, evaporation 3.062 inches.

Archer:

A half inch rain Sunday, and small showers on following days have helped the appearance of the field crops very much. Soil sampling shows a penetration of moisture to a depth of one foot, but the second foot is still hard and dry. Oats on all the plats has become full headed out this week. The field peas for green manure were plowed under. The average height was 16" and the average stand was 93%, with little variation in the different plats. All fallow plats, green manure plats and the brome sod plat were single disked.

Mr. L. D. Willey visited the station on the 21st; and Mr. C. W. Warburton and Mr. J. F. Brandon were visitors this morning. Temperatures: max. 92-22d, 25th, and 26th; min. 54-22d, means 90 and 59, precipitation .56", evaporation 1.670, wind velocity 5.7 miles per hour.

Big Springs:

The weather for the week has been hot and dry with no precipitation. Maximum temperature 98, minimum 67, wind velocity 8.3 miles per hour, evaporation 3.25, precipitation, none. The principal work for the week has consisted of cultivating, hoeing weeds and thinning crops. The general crop conditions re-

Big Springs: (continued)
main practically the same as reported last week, with the exception that it is getting drier all the time. The continued drouth is causing the stockmen to either feed their stock or ship them out. In a few cases herds have changed hands, but the price secured is considerable below the usual market price. Hay is being shipped in by the carload and is being hauled out to the ranges and fed to stock cattle, in order to tide them over until rain comes. Unless rain comes within the next thirty or forty days the situation will be extremely serious and many of the cattlemen will be put out of business. This is the worst drouth this section of Texas has had in years and we all are in hopes conditions will change for the better soon.

Colby:
The drouth continues. There has not been a drop of rain this week and the days have been hot though not windy till today, and today werare having a genuine hot wind. Most of the surface planted corn is beyong recovery while the listed corn is suffering considerably. The sorghums while still looking good are making no growth. Unless a rain comes soon this country is facing a failure second only to that of 1911. All the small grain plats were cut except M.C. Wheat D and the winter wheat on 257B. The last two were not ripe and have a little grain. The others were either dried up entirely or were so weedy that the grain they might yield wouldn't amount to anything. Some of the plats particularly the M. C. B plats of all the small grains, never had enough vegetation for even a mower to cut. Where the weed growth was sufficient the weeds will be raked and hauled off. The listed milo and feterita were gone over for the second time. They are about a foot high. Weather for the week: max. temp. 103, min. 58, average wind velocity (2') 5.9, (8') 8.7 mi. evaporation 2.160 inches, precipitation, none.

Dickinson:
Unusually hot windy weather has prevailed during the week. A maximum of 102 on the 23d, one of 108 on the 27th and most of the others around 95 has made the temperature conditions for the week considerably above the average. There has been no precipitation during the entire month of July which could be considered beneficial to crops in this vicinity. The total for the month up to dat is .05". Small grains are ripening fast but filling well. Some fields are too short to harvest with a binder but may be handled quite well with a header. Wheat will be the best of the small grains. Oats and barley are very poor ar flax fair. Cultivated crops up to the present have done very well but are commencing to show signs of suffering. Among the trees the pines and spruces have made the best showing. Hay is very poor. Winter rye on the station and in the vicinity was harvested during the week.

Dalhart:
The drought which has prevailed during the past two weeks remains unbroken and crops are making but very little growth. Several plats of corn have dried up and are being harvested. Only a few plants on the fallow plats have tasseled. It is too short to cut with the binder and is being cut by hand. Work on the cottage is ppogressing satisfactorily and it is now ready for plastering. Work will be started on the machine shed immediately. Maximum temperature for the week 101, minimum 60, precipitation, none.

Edgeley:

The Hot dry weather continued throughout the week. This makes the longest period of as high a temperature as we have been having lately, that is recorded in the Dry Land records. Saturday, the temperature was the highest that has occurred here since the work has been carried on, 111 degrees. The average maximum for the last ten days has been 95, and the average minimum 62, Fortunately the greater part of the small grains that are any good anyhow, seem to have been far enough advanced to stand the heat fairly well. Corn and flax and garden truck seem to have been considerably affected however. The barley on Nine was harvested the first of the week. The rest of the barley and the most of the oats are now ready to be harvested. The brome was also cut Monday. Mr. J. M. Stephens was here Monday. Yesterday afternoon a severe wind and rain storm occurred here. The board fence around the corral was blown down and pretty well scattered over the fields. The oats were also damaged considerably. About ,8 of an inch of water fell. Maximum temperature, 111, minimum, 49, precipitation, .03 inch.

Garden City:

Weather for the week, as usual was hot and dry. All of the sorghum crops curl badly during the day but have a good appearance each morning, and so far have shown no signs of injury from drought except where weedy. Corn is practically past redemption and will be harvested during the coming week. A great many of the stalks are now falling or bending over due no doubt to injury inflicted by chinch bugs. A furrow has been plowed around all corn plats and a fine dust mulch established to prevent migration of the chinch bugs to nearby sorghum plats. It is believed that most of the bugs are in the corn plats and it may be possible to control this pest in the above manner. A field of alfalfa across the road from the moisture reduction plats was cut the forepart of the week and grasshoppers by the thousands marched across to these and other adjacent plats. About 400# of poisoned bran mash was distributed and the pest has now been brought under control but not until after the moisture reduction corn plats had been considerably damaged.

On a trip made today (the 28th), it was observed that a large number of the sorghum crops on unirrigated land were very weedy and needing rain badly. Several fields were also seen upon which there was no crop except a rank growth of weeds. Maximum, 102, min. 61, evap. 3.128, wind 2'-6.9, 8'-9.8, precip.-0.

Hays:

July 22d .85 inches rain was recorded. The weather since then has been very warm, and part the time windy. Very hot winds yesterday and today. Under these conditions the .85 inches rain first of the week has done but little good and crops are suffering apparently as much if not more now than before the rain. All of the early fall plowing will be finished and the ground packed today. The ground has plowed very hard and dry. Spring wheat sown on fallow, the only spring wheat tall enough to harvest with binder, was threshed the 26th. This was too green to thresh when other grains were threshed. The best spring wheat on fallow yielded 4.7 bushels per acre. During the week soil moisture determinations have been made on most all of the kafir plats, and the M.C. series still has a chance to make a crop.

Dean Jardine visited the station Wednesday the 25th.

Huntley:

The past week has been the warmest ever recorded at this station. Maximum temperatures for each day were as follows:

Huntley: (continued)

July 22-97, 23-100, 24-103, 25-93, 26-93, 27-101, 28-103. A little rain fell in the form of light showers, but was of practically no benefit to crops. Spring small grain is almost beyond hope now and some of the corn plats are beginning to fire. Winter wheat rye and the MC barley plats were cut early in the week, as was also a plat of field peas and a plat of brome grass for seed. Roguing of oats and wheat plats on the rotations was completed yesterday. Maximum temperature 103, minimum, 55, precipitation .06 inches.

Judith Basin:

Warm dry weather continues to prevail here. Maximum temperature for week 96, minimum 44, precipitation .05 inches, evaporation, 2.348 inches. In spite of the dry weather the crops on the rotations still retain a good green color and while they need water they are not suffering to any great degree. Some corn on the brome rotations is beginning to show signs of wilting but for the most part the corn is in good shape. The clover plat gave a yield of 110 lbs. Harvesting of sixty day oats will probably start within a week if the present dry weather continues. The picnic held here last Friday, July 27th, was a pronounced success, and about 3000 people gathered here to spend the day. One man counted 500 automobiles on the grounds. Interesting talks were given by members of the faculty of the Montana Agricultual College, and various sports concluded the days's program.

Mandan:

The harvest of oats in the rotations was finished during the week. A temperature of 104 was reached on the 27th and was accompanied with high, drying winds that did considerable damage to late planted small grains. The potatoes and vegetable varieties are suffering badly from lack of moisture. Fa' yields have been received from the currants and gooseberries, but the raspberries and strawberries are practically a total failure this year.

Mr. R. F. Doneghue, of the N. D. Experiment station and O. A. Thompson, Superintendent of the Edgeley station visited the station on the 25th. Mr. F. Allen Clark and Mr. C. S. Reddy of the Cereal Office were here on the 26t'. Maximum temperature, 104, minimum, 53, precipitation, .21 inches.

North Platte:

There is no change to report in weather conditions. The drouth remains unbroken. Temperatures have run high for the entire week. Corn is fast approaching a condition from which it cannot recover and make a fair yield. A few tassels are beginning to appear. Threshing was begun yesterday. Oats already threshed has ranged from 29 bushels on summer tillage to a trace following alfalfa. Maximum temperature, 106, mean maximum, 95, minimum, 56, mean minimum 61, mean temperature, 74, precipitation, none.

Scottsbluff.

The continued hot, dry weather of the past month was only broken by a small shower on the 25th. All crops are suffering more or less from lack of moisture. The small spring grains are drying up and ripening very rapidly. Winter wheat and several plats of oats and barley were harvested Saturday. Grasshoppers have become very serious in the last three weeks and are doing great damage throughout the Valley. Oats and wheat on several plats on both the

Scottsbluff: (continued)
dry land and irrigated fields have been completely stripped of leaves by these pests. Mr. C. E. Mickel and Mr. Yates, entomologists from the University of Nebraska, are visiting the station at present and are employing measures to combat the grasshoppers. Mr. J. H. Martin of the office of Cereal Investigations visited the station Wednesday and Thursday. Maximum temperature, 101 on the 24th, which is the highest temperature recorded in the history of the station, minimum temperature 61 on the 28th, precipitation .21 inches, evaporation 2.036 inches, average hourly wind velocity 5.4 miles.

Sheridan:
The past week has been the hardest on crops of any this season. High temperatures, no precipitation, high evaporation and considerable hot wind has been the common thing. The following conditions obtained. Maximum 103, minimum, 53, precipitation, trace; evaporation, 2.482 inches, average wind velocity, 4.8 miles. On the 26th the temperature got to 102, and a heavy hot wind was blowing most of the day. The evaporation for the day was .556 inches. Crops have stood the drouth of this month in a surprising manner, but nearly all of the crops with the exception of oats and barley on rotation are going to have low yields as a result. Oats, barley and winter wheat on rotations are harvested, and some of these crops in the variety field. Corn is rolling up badly in the day time, but is standing the drouth in good shape. It has all tasseled and is just beginning to silk. Corn is suckering very badly this year which makes it too thick and will probably reduce the yield. The open range is dry and brown now, and passing trains are starting a good many fires.

Tucumcari:
Average hourly wind velocity, 6.2 miles, maximum temperature, 100, on the 21st and the 24th. Lowest temperature 68 on the night of the 24th, precipitation, none; evaporation 3.307 inches. The drouthy conditions continue unbroken by rain. Practically all the sorghums and cowpeas continue to look well and on some plats they are making quite a little growth. Corn is badly wilted during the daytime and prospects are very slim for it. Alfalfa does not grow a bit; no growth sufficient to cut has been made this summer. Some varieties of grain sorghums are in boot and a few are heading, though very low in heights, Our best crops, and the ones from which the best results will probably be obtained are those which were replanted on account of having been blown out by sand and wind early in the season. This replanted stuff is still very small but looks well and when rain is received will no doubt make rapid growth. Showers have occurred during the past several weeks in many places about here but we have not as yet had a rain heavy enough to do any permanent good. Some excellent crops are reported from some districts which have had rain, but as the rule, everything is very poor and discouraging from the farmers' standpoint. Work for the week has consisted of cleaning weeds away from fences and burning them; of moving rabbit proof fence from the north side of the plat field to a new line further north; of connecting up earthen storage tank with iron storage tank; of watering shrubs and trees about farmstead, and of many other odd jobs. During the week [illegible] 3000 pounds of Milo, the last on the place, was ground for horsefeed. Soil samples were taken on all plats sampled this year. Fallows seem to have made a slight gain in moisture so far while practically all cropped plats have lost somewhat.

Williston:

Precipitation .05 inches, minimum temperature 54, maximum 109. This was the hottest on record in the entire period of 38 years in which weather records have been taken here. The week was generally hot, with hot winds, which practically dried the crops on the ground. Barleys have been cut, also most of the wheats on the dry land plats. Although [illegible] short and thin, the grain seems to be well filled, and in general, the crop will be of good quality. On a trip of a total of about seventy miles east and southeast this week it was observed that crops have a better appearance than those in the immediate vicinity of the station, and that in all probability one half a normal crop will be secured. Corn is very backward in all places, much of it is now beginning to tassel at about three feet high. This crop, potatoes, and flax need rain immediately. The annual county picnic will be held at the station on Friday August 3d.

Woodward:

In the absence of Messrs. E. F. Chilcott and H. J. Clemmer who left for Dalhart and Amarillo, Texas, on July 25, I am taking the liberty to write you the report of conditions at this station.

The main work done this week at this station has been plowing roads and small grain stubble, increase plats mainly, for the teams, and hoeing weeds from all fields and plats for the other laborers. The soil is rather dry to plow but by changing shares about once a day it can be accomplished. The city water supply is getting low and as the station is about 30 to 50 feet higher than the main part of town, our water service here is intermittent at best. Water to fill the evaporation tank had to be hauled this morning. Some of the ornamental shrubs are suffering from the drought and hot weather. Kafir seems to be standing the weather better than milo or broomcorn. Rain now could not save much of the corn on the station and with the other row crops it is merely a question of whether they can wait until it does rain, also, when will we get a rain? It is certain that none of the crops will be able to last much longer should the present conditions continue. Weather report for the week: maximum temperature, 103, minimum, 66, average wind velocity, 7.9 miles, evaporation, 2.835 inches, precipitation, none.

NOTE:

I am mailing you under separate cover, a supply of pamphlets, issued by the Department of Agriculture in regard to food wastes, with the request that you enclose a copy in letters addressed to parties outside the Department, and otherwise distribute same.

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WEEKLY STATION REPORTS

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DRY LAND AGRICULTURE INVESTIGATIONS

Bureau of Plant Industry

U. S. Department of Agriculture

August 11, 1917.

REPORT FOR THE WEEK ENDING AUGUST $, 1917.

Akron:

The past week has been dry and hot and grain has ripened rapidly. The spring wheat on the rotations and variety tests was harvested during the week. The most of the spring wheat on the rotations was high enough to bind well. Winter wheat is ripening but is not maturing as rapidly as the spring wheat because of the thin stand. Local hail storms have done considerable damage in this part of the state this season. Harvest will be finished this next week. Wheat will probably average 6 or 7 bushels per acre in the county. Unless we have a rain soon there will be very little corn. Maximum temperature for the week 99-28th, minimum 48, precipitation .21 inches.

Amarillo:

Threshing was commenced on the station today. It was intended to begin this early in the week but some rains and showery weather delayed us besides work of making excavation under the superintendent's house for a cellar being on hand. Not enough rain came on the station to do only very temporary benefit to the crops, although in town and for some distance north and south of Amarillo, over an inch and a half of rain was recorded to .51" here at the station. On August 1st, an inch of rain came down in a very few minutes, being in the nature of a cloud burst and streets and gutters were flooded with water and a boat was rowed around the court house square in Amarillo. The small showers, not penetrating deeply enough to help row crops but little, have started a considerable growth of weeds especially on the fallow plats.

Weather for the week was: maximum temperature 97, first 3 days, minimum 62 on the 2d and 4th, hourly wind velocity 9.9 miles, precipitation, .51", evaporation, 2.555". Weather summary for July:

Max. temp. 100 on 5th & 13th. Avg. max. 93 10 year normal 91
Min. temp. 60 on 3d & 16th. Avg. min. 65½ 10 year normal 64
Mean temp. for month 79, 10 year normal 77.
Total wind movement (2' ane) 6.826 miles, hourly 9.2 miles.
10 year station normal per hour for July 7.3 miles.
Precipitation 2.61 inches, 10 year station normal for July 2.75 inches.
Total precipitation since Jan. 1st 6.92 inches. Normal for period 10.66 inches.
Deficiency to date 3.74 inches.
Evaporation 6' tank 12.430 in. 10 year normal 10.77 inches.
Evaporation 8' tank 12.045 in. Vapor pressure .428, 10-yr. normal .490.

Bellefourche:

The past week has been the hottest of the season. High temperature with considerable wind has caused all crops to suffer. The average maximum temperature for the week was 101. On the 28th, the temperature rose to 108. This was the hottest day since 1910.

Oats and barley are now cut. All plats will produce a little grain though none of the yields will be high. Wheat dried up rapidly during the hot weather and wheat yields will undoubtedly be low. All of the corn suffered, some of it severely, on the hottest days. This suffering took place in spite of the fact that there was still a large amount of available moisture in the second foot of soil. Minimum temperature, 63, precipitation, .04 inches.

Big Springs:

The drouth situation still remains unbroken and the crop conditions on the station are about the same as reported in previous reports. A portion of the eastern part of the county received a good rain the fore part of the week and also a small section to the northwest of us. The work for the week has consisted of cultivating the various crops, hoeing weeds, trimming plats and watering a portion of orchard set out in the spring of 1917. Most of the orchard trees have held their own pretty well this season but are now beginning to show effects of the drouth. The total rainfall since January 1st, amounts to 3.60 inches. On comparing this amount with 10.74 inches, which is the average precipitation for a seventeen year period, leaves a shortage of 7.14 inches for this season for the same period. Notwithstanding this fact we still have a prospect of raising a fairly good crop on many of the plats, if the condition change soon. Max. 99, min. 66, wind vel. 8.3, evap. 2.82, precipitation, .03.

Colby:

The drouth continues, and the prospects of even a fair amount of feed crops are growing less and less as the days pass. The surface planted corn is all practically brown and the listed corn is showing brown in spots and is badly wilted all over. Much of the corn is beginning to tassel. Where there is a normal stand of sorghums on continuously cropped land they are wilting and the tips of the leaves are brown. Sorghum sown broad cast is practically dried up at a height of not more than two feet. The fall plowing on the D.L.A. plats was finished during the week. There was no moisture in the furrow slice. The ground not plowed last year was very hard while that plowed last year was so loose that the plow merely shoved the dirt over turning it just enough to cover the scant stubble. Weather for the week: maximum temperature, 104, minimum 57, hourly wind velocity (2') 8.5, (8') 12.1, evaporation 1.765, precipitation, .12".

Weather for July: maximum temperature 104-28th, 1916-100, minimum temperature 50-15th, 1916-53, evaporation 9.579", 1916-11.231", precipitation 3.07", 1916-2.07", average 2.64", precipitation January 1st to August 1st 9.04", 1916-9.51", average, 12.01".

Edgeley:

The weather has been somewhat cooler since Sunday. The grain has ripened rapidly, however, and about all of the small grain, except the wheat on the station is now ripe. All of the barley, and the oats on the station have been harvested. The oats on the station were quite badly damaged by the storm last Sunday, some of it by hail and some by wind. The hail also damaged the corn on the station some. There were no signs of any hail on Nine, and very little of the wind storm that hit the station. From twenty to forty miles east of here a large amount of grain was destroyed by the hail, and a large number of barns and other buildings were torn down. Maximum temperature, 98°, minimum temperature, 45°, precipitation, .88 inches.

Garden City:

There was no change in the character of the weather during the week. For the first three days of the week maximum temperatures ranged as follows, 103, 104, 104; accompanied by hot winds which caused some injury to sorghums. If sufficient rain is secured in a couple of weeks, most of the sorghums will still make fair yields. Freed's sorgo is fully headed and is doing nicely. Two plats of sudan grass which was beginning to dry up at a height of about 3 feet

Garden City: (continued)
was harvested. All of the corn except plats MC. "D, F. & G" were harvested. Beans and cowpeas are now is bloom. Grasshoppers on the station farm are now completely under control.

Director W. M. Jardine visited the station on the 2d. Minimum temperature for the week: 62, wind velocity 2 ft. ane. 10. miles, 8 ft. ane. 14.2 miles. Evaporation for the week, 3.360", precipitation, none.

North Platte:

Another week has passed without any important change in weather conditions. Temperatures have not been q uite as high but we are still without rain. The total rainfall for July was .78" or 28% of the normal.. The total June and July rainfall was 2.78" or 46 percent of the normal for these months. Corn with the exception of late plantings and very thin stands is injured beyond recovery. Threshing has been completed, and yields will be summarized for next week's report.

Sheridan:

Another dry week has passed with the following weather conditions: Max. 97, min. 43, precip. 0, evap. 2.168 and wind velocity 4.8 miles.

A dryer month, than hasjust passed, has never been recorded at Sheridan, there being but .09" of precipitation. There was 4 days during the month when temperatures were above 100 the maximum being 103, and these temperatures were somewhat unusual here. Inter-tilled crops are holding up well, and apparently are not suffering, although during hot days they show the effect. Small grains have dried out and most of them are either harvested, or will soon be ready, although most of them did not ripen normally. Spring wheat on rotations is being cut today, and promises to give very low yields. The flax is drying out fast and will soon be ready. In the variety field all of the rates and dates are cut, as well as all varieties of winter wheat and varley, and part of the spring wheat, and oats. Corn is in the silk, but has suckered so badly that the yield will probably be reduced. The thresher has been gone over, and will be set for threshing the fore part of the week. Land is being prepared for seeding winter wheat, but it will be impossible to secure a suitable seed bed. MC winter wheat B has been plowed, and also the sod plats of rots. 41 and 42. Considering the dry condition of the soil, they all plowed in good shape.

The hay crop is short in this section, the pastures are dried out, and a good many of the cattle men are now shipping their beef, a month or six weeks earlier than usual. A good many too will be short of hay and are reducing the size of their herd. Another year there will be a good many less cattle in this section than before.

Woodward:

The weather continues hot and dry with no indications of rain. We had one small shower on the night of July 31st, but it was so small that it did not make any change in the crops. If it does not begin to rain now pretty soon we will not have any harvesting to do except on some of the fallows and that will be pretty short. The cowpeas and cotton seem to be the only crops that are not suffering from the continued drought. The milo looks good on the methods of fallow plats, on MCD, and on the rotations where it follows a fallow.

Woodward: (continued)

On the other plats it is very short, "a little better than a foot in some cases", and is badly rolled and burned. The broom corn also looks good on the methods of fallow plats and M.C.D. but on the other M.C. plats it is badly damaged. The listed plats are showing up better than the fall or spring plowed plats. The sorgo is so badly burned that it is beginning to fall over on all the plats but the fallow. On this plat it looks good and is heading. The milo, broom corn and kafir are heading on the fallow plats. The kafir is standing the dry weather better than any of the crops sexcept cowpeas and cotton. The kafir is still green and apparently making some growth on all the plats but rot. 402 B. where it is short and badly burned. In this case it fallows spring plowed W. wheat. The field corn was cut on all the plats except M.C.D. on July 30. It was so badly burned that on some of the plats it was lying flat on the ground. There was not enough of it on the plats to pay to haul it in and weigh. The corn on the fallow is about 5 ft. high and fairly green yet altho it has begun to burn the last few days. Plowing is all done for the fall planting on the rotations except the late fall plowing. The road ways are being plowed at this time. If the weather continues dry much longer we will have a much earlier harvest than we had last year.

Noting the conditions of the crops between Woodward and Dalhart, going thru the Panhandle of Oklahoma, we found that some of the farmers had reasonably good stands and the crops looked good. This however was only in localities. Some localities would have nothing while others would have good looking crops. The rains seem to have been locally distributed. Ten miles north of Dalhart the crops were green and there was plenty of good grass for the cattle. Water was standing along the trail in some places. Around Dalhart the grass was burned up and the crops suffering for water. The stands secured were thin, some of them too thin for any good evenif it would rain. At Amarillo the crops were looking good. The crops at Amarillo were looking better than any we have seen along the line. Farmers are beginning to try to get rid of most of their cattle because of the shortage of feed. If we should get some good rains in the near future there would be a great deal of feed sown for the winter. Red Amber cane seems to be the best feed to sow at this time of the year and if the seed can be secured it will probably be the most widely sown. Farmers are busy preparing the ground for the fall seeding of wheat.

Weather report: maximum temperature, 103, minimum 63, evaporation, 2.756" average hourly wind velocity 8.8 miles, precipitation, .24 inches.

Archer:

All crops, except those damaged by squirrels and rabbits, are looking good. The winter wheat and the barley are ripening. Corn has made a good growth this week. All corn plats were cultivated and the weeds hoed. A general field of winter rye was harvested the first of the week. It's height was 40". One spring seeded plat of brome grass had the weeds mowed on it. It and the one seeded in the plat of spring wheat have a good stand of brome. The spring seeded plat of alfalfa has a very good stand, and is about eight inches high. Russian thistles are bad in some of the flax plats, especially the fall listed one; but all other plats are fairly clean of weeds. Temperatures: max. 92-3d, minimum 47-1st, precipitation, .57 inches.

Bellefourche: Report for August 4:

(The report for this station on page 1 is for the week ending July 28.)

Cool weather has prevailed during the last week and this had enabled the corn to recover from the effects of the extremely hot weather. The corn is now tasseled and silks are beginning to appear. All grain except winter wheat is now ripe. For the last three years winter wheat has been the last grain crop to ripen. A short trip through the country north of Newell was made last week. Very little dry land is planted to any grain crops and most of the grain planted has been very badly damaged by drought. In some favored localities fair yields of grain will be obtained. Maximum temperature for the week, 100, min, 47, precipitation, .45".

Dalhart:

The weather continues dry and all crops are past the stage where it will be possible to get any grain yields. About half of the leaf surface of the sudan grass has dried up and fallen off. The corn except on the fallow plots has dried up and the most of it has been harvested; not a tassel has appeared. The amount of precipitation recorded to August 1st was 5.90". This is 3.40" less than was recorded last year and is 4.79" below the average for the average for the past eleven years as recorded for similar periods. All of the carpenter work on the cottage has been completed except some inside finish and there is about two days plastering yet before it will be ready for the painters. The foundation for the new machine shed has been poured and one car load of lumber for this shed hauled.

Lawton:

More moderate weather conditions prevailed from the 22d. of July to the 28th. The maximum temperature for that time was 101 and the wind movement was rather low. No hot winds were recorded. M.C.B. and E wheat plats were plowed and disked on the 23d. Rot. 142 A and 134 D were plowed and disked on the same date. Rots. 133 and 134 C were seeded to sweet clover on the 23d. Crimson clover was seeded on Rot. 254 A on the same date. As yet, a stand is not in sight . Cowpeas and milo planted on wheat stubble on the 20th resulted in a good stand. On the 24th, the following crops were planted in rows to compare with the various crops that were planted about the same time in the surrounding country: dwarf milo, dwarf kafir, brown kaoliang, feterita, red amber, freed sorgo, sudan grass. The sorghum crops are coming on quite rapidly but everything is now badly in need of rain, especially where the plants are thick in the row. Broom corn will be pulled with in a few days. Some of the earlier plantings of red amber have a few ripe heads at this time. Practically all of the

Lawton: (continued)
earlier maturing crops are pretty well headed. Corn was harvested on the 1st. of August except the M.C.D. plat which continues to remain green and develope a few nubbins. Several days during the present week have been quite sultry. Although 100 is the highest maximum recorded for the week the heat seemed oppressive. Threatening clouds were numerous and a few local rains were reported at various neighborhoods.

Mandan:
A precipitation of .37", followed the hot weather of last week. A maximum of 107 on the 28th equalled the absolute maximum for 45 years as recorded by the Bismarck Weather Bureau station.
Haying and harvesting have been continued during the week.
Mr. T. R. Stanton of the Cereal Office, visited the station on the 30th; and Mr. F. V. Rand, of the Pathological Laboratory on the 2d of August. W. A. Peterson visited a number of farms in the vicinity of Bismarck on the 3d. One farm on the Missouri bottoms includes 480 acres of alfalfa which was being cut the second time. Three cuttings of excellent alfalfa are usually taken from this land. The maximum temperature was 107, minimum 47, precipitation, .41".
The harvest of wheat has started. Second cutting of alfalfa was made during the week.

Huntley:
The past week has averaged considerably cooler than the previous two weeks though no precipitation of consequence has fallen. Corn is practically all tasselled out and on some plats the silks are appearing. Oats is being cut today. Spring wheat and flax are turning rapidly and will be ready for harvest early next week. Soil samples taken during the week show all cropped plats to be very dry to a depth of four feet. Fallow has considerable moisture in the upper two feet but below that depth the soil resembles that of the cropped plats.
Temperatures: maximum 96, minimum, 43, precipitation, .11 inches.

Tucumcari:
Average hourly wind velocity 7.4 miles per hour. Maximum temperature 98 degrees on the 29th, minimum, 61-31st, 1st, precipitation, .01-1st, evaporation, 3.073".
The drouthy conditions at the station continue although showers are reported to the south and east of us. North and northeast it continues practically the same as here. Crops on the station are making slight growth. Some of the ones which are farthest advanced are burning somewhat. Practically all varieties of grain sorghums are in boot and many are showing heads. Several varieties of cowpeas are in flower. One plat of early buff are almost mature. Crops, as a rule, which are adapted to this section are looking fair on the station. Other crops are very poor--that is so far as affected by the drouth. Of course, the damage done by blowing sand affected nearly everything equally. Work for the week has consisted of cultivating all of field crops, of building and repairing fence and of miscellaneous jobs.

Williston:
All the rotation plats except the flax in rot. 13 have been harvested in the week. The grain is fairly well filled and promises now slightly better returns than generally anticipated. Corn is still suffering for lack of moisture.

Williston: (continued)
Harvest is well begun in this section. The average wheat yield is estimated at probably 6 bushels. Oats will be a very light crop, in fact, it is probably that feed oats will have to be shipped into this territory this year.
The countyypicnic was held on the station on Friday, the 3d, with an attendance of approximately three hundred. Besides local speakers present, Direvtor Cooper of the station was here. Maximum temperature 99, minimum 42, with the week generally cooler. Precipitation .13 inches. There was a precipitation of .26" in July, the lowest on record for the 41 years such data have been kept. There has been only 4.45" of precipitation since April 1st.

Judith Basin:
The weather has been somewhat cooler here during the past week. Some of the early varieties of peas and barley at the station, were harvested in the latter part of the week. Harvesting on the rotations will probably start Monday, as the oats and barley are ripe. Some of the oat plats are ripening very unevenly. Maximum temperature for the week 91, minimum 37, precipitation, .15", evaporation 2.327 inches.

Scottsbluff:
The weather has been comparatively cool and more favorable to crop growth during the past week. Harvesting of all spring grains on the Dry Land field is completed except for 5 winter wheat plats which were reseeded to spring wheat. The second crop of alfalfa on 42 C and 42 D was also cut but only a few pounds of hay will be obtained from each plat as very little growth has taken place since the first cutting due to the hot dry weather of the past month. Maximum temperature 96, minimum temperature 46, precipitation .49".

NOTE: UNITED STATES EMPLOYEES' COMPENSATION COMMISSION

UNION TRUST BUILDING
WASHINGTON, D.C. July 26, 1917.

The Honorable,
The Secretary of Agriculture,
Washington, D. C.
Sir:

The reports of injuries to civilian employees of the United States which have been made to this Commission during the past year under the Compensation Act of September 7, 1916, by the various Government departments and services indicate that there is a misunderstanding on the part of some officials as to the injuries concerning which reports are required. It seems desirable, therefore, to call attention to the fact that the Act (Section24) requires that after any injury to an employee resulting in death or in disability his immediate superior shall make a report to this Commission containing such information as the Commission may call for.

In accordance with this provision, reports should be submitted in regard to every injury resulting in death, or in any loss of time, or in any expenditure for medical, surgical, or hospital services or supplies. It should be understood that these reports should not be omitted in cases in which the time lost was covered by annual or sick leave or in which no claim for compensation is contemplated.

Very truly yours,
(Signed) R. M. Litte, Chairman.

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WEEKLY STATION REPORTS

of the office of

DRY LAND AGRICULTURE INVESTIGATIONS

Bureau of Plant Industry

U. S. Department of Agriculture

AUG 8 1919

REPORTS FOR THE WEEK ENDING AUGUST 11, 1917.

Akron:

The past week has been comparatively cool with light precipitation. Corn has recovered rapidly from the effects of the hot weather and drought and is now in silk. The harvesting of small grains was completed during the week and the oats on the rotations threshed. The average yield was 26.2 bushels with a maximum yield of 45.3 bushels on the alternate cropping and summer fallow plot. Maximum temperature 89, minimum 40, precipitation .81 inches.

Amarillo:

Several threats of rain during the past week failed to materialize into anything but light showers that were very superficial in their benefits to the crops. The best we got was half an inch of rain on the night of the 6th. The row crops are suffering severely and every day now without rain is cutting down prospects of grain yields. Corn is drying up and probably will be cut within a few days for fodder. Milo has been trying to head out the past 10 days and the kafirs are now commencing to head. Threshing of the season's small grains was nearly completed. Winter wheat on the D.L.A. plats averaged about 6.3 bushels per acre. Yields by plats will be reported next week for all the small grains. The plats for early fall plowing were plowed the latter half of the week. Weather for the week was: maximum temperature 97, minimum 61, hourly wind 10 miles, precipitation .55 inches, evaporation 2.437".

Archer:

Corn is looking good; and tassles and silks have appeared. All plats of oats and spring wheat present a fine appearance, and have well filled heads. Barley is short, but will make a fair yield of grain. Three plats of barley and one of spring wheat were harvested this morning. The other plats of these crops will be harvested the first of next week, as they are yet a little immature. The barley is not too short for harvesting with the binder, although much of it is loose. The large weeds were removed from the edges of the plats. Soil sampling shows that the recent light rains have softened the hard, dry, second-foot layer in places, and has reached the deeper moisture from the spring precipitation. Visitors at the station this week were Mr. C. H. Clark of the Cereal Office, pathologists, Dr. A. G. Johnson and Mr. Harry Braun.

Cool, cloudy weather occurred the middle and latter part of the week. Temperatures; maximum 88-10th, minimum 45-7th, means 77 and 49, precipitation .59 inches, evaporation 1.312 inches, average wind velocity, 7.4 miles.

Ardmore:

Maximum temperature for the week, 100, minimum 42, total precipitation, .6". There has not been any precipitation of any consequence in this section of the country since the middle of June. The week ending August 4th was the hottest ever recorded on this station. Twice during the week the temperature reached 102, and on one day it reached 103. The crops have suffered materially for want of moisture and it seems that tilled crops including corn and forage crops suffered equally as much as small grain, due to the state of maturity of the small grain during the excessive hot weather.

The annual farmers' picnic was held on this station, July 26th. About 700 people were in attendance, and it was a pronounced success in every respect. A great deal of interest was expressed in the dairy herd which was on exhibition. An exceptionally good feature of the day's program was a canning demonstration given by the County Agricultural Agent in cooperation with an officer

Ardmore: (continued)
of the Brookings Agriculture College. A great deal of interest was expressed by the ladies in this canning demonstration. The chief entertainment of the day was an exhibition of trained thoroughbred horses by Mr. Roy Johnson, who lives in the vicinity of Ardmore. Without expense to this institution, he put on two high dives by two of his horses, and also gave an exhibition of his gaited horses. Among other horses he had in the show ring was "Sterling Prince" a high school horse of exceptional ability. Some members of this office may recall a report which was published in the "News Letter" for the week ending May 6 , 1916, in which the superintendent of this station reported the treatment of a horse for a broken leg. It will be recalled that this horse was "Sterling Prince". In the show ring on picnic day on this station, he showed that he had entirely recovered from this broken leg, and was able to use the same without the casual observer being able to detect the slightest defect in action.

Colby:
The long, disastrous drouth has been ended by three inches of rain during the week. The rains were general over the county but came too late for most of the corn. Tuesday afternoon the rain was accompanied by a severe hail storm which destroyed almost all the war gardens, hopefully replanted after the hail storm of June 5th, and patiently hoed and watered all summer. The sorghums were badly damaged but are beginning to shoot again. The moisture has soaked down about eighteen inches and the surface is still too wet for field work. The prospects for more rain before long are very bright. Weather for the week: maximum temperature 95, minimum 52, average hourly wind velocity (2') 6.8 mi. (8') 11.3 mi., evaporation 1.772", precipitation 3.00".

Dalhart:
The weather continues dry but is some cooled which has lessened to some extent the effects of the drought. Thirty-nine one hundredths inches of rain was recorded during the week. This rain fell in five different showers on as many days and was so far as moisture is concerned of little or no benefit. There has been a great deal of difference in the way the crops have withstood the drought on the different methods of tillage. The subsoiled plots being the first to dry up with the fall plowing plots a close second. The spring plowed plots ranking next to the fallows which have shown the greatest resistance. This is true without exception with all of the crops used in this series. This is especially noticeable in the field although the yield from all of the plots will be little better than a failure. A few of the sorghum plots on the fallow land have headed but are not filling. There will be practically no grain produced in this entire country and but very little roughness. Feed is so scarce and high and the range in such poor condition that the annual crop of calves are selling at a very low price and a great many cattle are being offered for sale with few buyers. Maximum temperature for the week: 99, minimum 57, precipitation .39".

Hays: Report for the week ending August 4th.
Dry hot weather continues without rain. Maximum temperature 108, minimum 63. Soil sampling and killing of scattering weeds was the program of th week. Crops still are suffering because of the extreme unfavorable weather conditions.

Hays: Report for the week ending August 11th.
Our prolonged drouth has at last been broken. Have had more or less rain

Hays: (continued)

Every day from the 7th to 11th inclusive with a total to date of 2.47". The heaviest rainfall was on the 8th when the rain gage measured 1.33. A large part of this was lost by run-off. A heavy storm accompanied the rain on the 7th. Wind and hail caused heavy loss of property and crops about 5 miles north and east of the station. Several buildings were blown away and many others had the glass pounded out by hail. One house had all the glass knocked out on three sides, west, north, and east. And the hail came through the roof so that it was necessary to re-shingle both house and barn. Turkeys and chickens were killed and stock were pounded up so that the animals were bleeding in places. There was considerable hail at the station but of small size. Maximum temperature 104-5th, minimum 56-10th; with the exception of a couple days the first of the week, the weather has been very cool and cloudy. Rainfall from January, 1917 to July 31st inclusive-7.45 inches, normal for period, 14.51.

Huntley:

Harvesting of spring wheat and oats was completed this week and a few of the flax plats were cut. Threshing of winter wheat, barley, rye, peas and brome grass was done Friday and Saturday. Yields were light but in many cases much better than expected. Winter wheat tested from 53 pounds per bushel, on fallow to 62 pounds per bushel on disked corn land. The average test was 57 lbs. Maximum yield of winter wheat was obtained from plat K of the fallow methods, 31.8 bushels. Minimum yield 6.7 bushels from manured fallow, rot. 38. Average for winter wheat 16.6 bushels. Maximum barley yield 24.2 bushels from M.C.D. and minimum 8.3 bu. from M.C.B., average 15.8 bu. On the acre plats of rot. 651, rye gave 9.7 bu., peas 2.3 bu. and barley 16.2 bu.

Brome grass seeded in rows and pastured for a month was allowed to set seed. The grass was then cut with the binder and threshed in the usual manner except that the blower was not used. The yield obtained from the acre plat was 226 lbs. of rather chaffy seed. Hogs on rot. 652 were moved from the peas to the barley plat where they will finish. The average daily gain on peas was 1.15 pounds per pig. Max. temp. 88, min. 40, precip. .01".

Lawton:

During the past week indications of rain have occurred several days. With the exception of two days the temperatures were not excessive and the wind velocity averaged pretty low for the entire week. Local rains were reported in several surrounding localities but it was not until Friday night that this immediate vicinity received a rain of any benefit. The precipitation recorded for the week is as follows: Aug. 6-.07, 8th-T, 9th-.., 10th-.07, 11th-.56, 12th-.12--total .82". The last two rains together with some cloudy weather and cool temperatures at night afford some relief for cotton and the sorghum crops. Broom corn on the M.C.plats was pulled on the 11th, and placed on the racks in the barn for curing.

On the 9th, the County Agents in southwestern Oklahoma, farmers in Commanche County, officials from the Extension Department at Stillwater, and various others met at the station to discuss some of the problems relative to next year's wheat crop. As nearly as could be estimated about 650 people were in attendance. The farmers manifested a keen interest in the observation of the crops and the work that is being done on the station. The farmers had a picnic dinner on the grounds and music was furnished by the Roseland Community Band.

Mandan:

Threshing of oats in the rotations will be completed today. The yields run from 13 bu. on brome sod to 50 bu. on manured fallow. The quality is good, and the oats weighs from 32 to 37 lbs. per bushel. All fallow plats were double disked this week.

Mr. A. C. Dillman was here during the week and looked after the harvest of his millets and made a few alfalfa selections. Most of the millets had been so effected by drought that they had reached their maximum growth. All wheat with the exception of a few plats on fallow in the South Field, was harvested during the week. Part of the barley and all the flax in the rotations was harvested. The wheat, oats, barley and part of the flax of the Office of Cereal Investigations was also harvested. Wheat yields will be good on the station for the season. Threshing of wheat may be completed next week.

Word has been received that Arthur W. Schulz, who was injured about two months ago and who had gone to Sterling, Kansas, to recuperate, was accidentally killed by a train on the sixth. Mr. R. S. Towle, who until recently has had charge of the work of the Office of Dry Land Agriculture at Edgeley, N. D. reported for duty on this station on the ninth. Mr. Max Pfaender and Mr. Thomas Killand visited a number of horticultural plantings in the vicinity of New Salem on the sixth. Mr. A. J. Ogaard and Mr. Donelly, of the Hettinger Station, visited Mandan on the fourth. Maximum temp. 80, min. 38, precip. .04"

North Platte:

Weather conditions have changed materially during the week. The eastern part of the state has received heavy rains. Here at the station .40 of rain fell Monday night. Since that time it has been cloudy with several light showers. While the rain has been insufficient in amount to give corn and forage crops very much relief their condition has improved somewhat during the week.

Following are the per acre grain yields secured this year:

Spring wheat	Following	small grain	31 plats	5.0	bushels
"	"	corn	20 "	7.4	"
"	"	fallow	8 "	12.8	"
"	"	G.M. rye	2 "	13.0	"
"	"	G.M. peas	2 "	12.6	"
		Averages	66 plats,	7.1	bushels.
Oats	"	sod	2 plats	0.0	bushesl
"	"	small grain	14 "	4.9	"
"	"	corn	11 "	9.9	"
"	"	fallow	5 "	20.4	"
"	"	G.M. rye	3 "	6.3	"
"	"	G.M. peas	3 "	15.8	"
		Averages	43 "	9.6	"
Barley	"	small grain	3 "	10.1	"
"	"	corn	1 "	18.1	"
"	"	fallow	1 "	35.0	"
		Averages	4 "	15.6	"

All winter wheat was winter killed and the plats reseeded to spring wheat. Yields of these plats are included in the average for spring wheat.

Scottsfluff:

The past week has been cool with a small amount of precipitation from three light showers. Although corn and sorghum are suffering to some extent from

Scottsbluff: (continued)
lack of moisture, they are withstanding the continued dry weather remarkably well. The annual picnic held on the station August 8th was a marked success. There was an attendance of over 1500 which is more than double that of any previous year.

Prof. M. H. Swenk, head of the Entomology Department of the University of Nebraksa, has been visiting the station since the 6th, investigating grasshopper damages in this locality and directing control measures. Maximum temperature 89, minimun 50, precipitation .23".

Sheridan:

The following weather conditions obtained during the past week: Max. 84, min. 41, precip. .05", evap. 1.592", wind vel. 4.7 miles.

Cooler weather has prevailed during the past week, and the crops left standing are still in a healthy condition. Corn has silked and the ears are filling very well. With about a month of frost free weather under normal conditions, and a good chance of rain soon, judging by weather conditions, the corn should mature and make a fair yield. Samples are being taken on all of the rotation plats, at three depths down to 40 inches, from which complete chemical analysis will be made. Plat winter wheat M.C.E. was subsoiled yesterday, and plat F. was listed today. A few winter wheat and oat plats have been threshed from the rotation field, From the former yields of about 12 bu. were obtained while oats will probably average 25 bu. The wheat is somewhat shriveled and the oats are very light. The first date of seeding winter wheat was planted during the week.

Tucumcari:

Average hourly wind velocity 6.8 miles. Maximum temperature 100, minimun 62, evaporation 2.712", precipitation, 1.44".

The principal work for the week has consisted of hoeing weeds from lower field by hand, following the cultivator. Also all rotation and O.C. plats in upper field have been cultivated and hoed out this week and good start made on the variety and other comparative work. The 1.42" of rain falling last Satuday came rather fast but the ground was in good shape to receive it and not as much run-off occurred as one would expect under the circumstances. The rain was very local in character. In town, only about 2½ miles away only a light shower was received. It extended about 14 miles north of us. It came from the northwest and passed by in an easterly direction.

Yesterday the writer took a trip out over the plains, about 130 miles in all and was surprised at the excellence of some of the crops seen there. Several fields of Milo were seen where this crop was fully headed and where the crop stood nearly five feet over the fields. Other fields close by, however, were very poor, uneven, and small. By observing the relative sizes of growth of the crops seen one could almost outline the areas which have received the local thunder showers reported recently. One of the largest wheat growers in the county reports a total failure this year. During nearly a half days driving over the plains I saw only seven stacks of wheat, but I did see many fields which were not cut on account of being too poor. Only one field of sudan grass was seen. The stand was very poor and uneven. Only one good field of corn was seen, and only a portion of this, perhaps ¼ of one acre was good. The good corn was nearly 7 feet high and fully tasselled. The poor, growing within several hundred feet of the first was not over a foot and a half high and was badly burned. It was noticed that in every case where good crops were observed

Tucumcari: (continued)
that the land was sandy in character. In many of the fields showing poor crops, the soil was clayey in character. In all I expect I observed over 200 fields of crops and not over 2% of these were in other crops than Milo, Kafir or one of the feed sorgos. The rain last Saturday revived crops on the station and everything is looking as well as could be expected. It is quite likely that corn which was not too far advanced or too badly injured by drouth will recover partially at least. This rain is the first we have had since October 1915 which caused any soil to wash.

Woodward:
The long drouth was broken on the night of the 6th with a rain of 1.82 inches. Since that time we have had several small showers that will help to bring crops to life. Some of the crops that looked as if they were entirely gone have begun to green up and look as if they would at least make forage. For the last week we have had cool days with a rather humid atmosphere. Since the large rain we have seeded all of the waste places to alfalfa. We have also seeded the sweet clover plats on rotations 35 and 36. The plats that were seeded last fall and reseeded this spring were also reseeded at the same time the B plats were planted. We hope to get a good stand from this planting and get it far enough along that it will not winter kill. The corn on plat M.C.D. was harvested on the 10th. There were no ears present but a fair amount of fodder was secured. We will begin to harvest the broom corn on M.C.D. and on the methods of fallow plats now in a few days. All of the plats are prepared for the fall seeding of winter wheat, and the rains are being taken up by the soil as soon as it falls. The farmers are busy plowing and listing for the fall seeding. Some few farmers that are able to secure seed are doing some planting for fall feed. Some are planting milo as late as this, hoping to get some forage for winter feed. The late planting that was done on the station is looking good and making rapid headway. This later seeding was not hurt so much by the drought as the earlier planting. Weather report: max. temp. 102, min. 62, average hourly wind velocity 7.1, evap. 2.164, precip.2.31"

Judith Basin:
Weather conditions for the week have been cool but dry. Maximum temperature for week 83, minimum 37, precipitation .12", evaporation 1.472".
All the oats and white smyrna barley on the rotations have been harvested. The short growth of the grain made it difficult to cut some of the plats clean with a binder, especially those on the brome rotations. Headers are reported to be in great demand this year, and will be generally used in this region, wherever they can be obtained. Some spring wheat has already been harvested in the Judith Basin, and harvesting will be general within a week or two.
H. V. Harlan and S. Anthony from the office of Cereal Investigations are the station.

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WEEKLY STATION REPORTS

of the office of

DRY LAND AGRICULTURE INVESTIGATIONS

Bureau of Plant Industry

U. S. Department of Agriculture

AUG 25

REPORT FOR THE WEEK ENDING AUGUST 18, 1917.

Akron:

The past week has been comparatively cool with high humidity. The spring wheat and a part of the winter wheat on the rotations were threshed during the week. Spring wheat yields varied from 8.7 bu. on rot. 58, to 20.8 bu. on rot. 32. Spring wheat on summer fallow averaged 16.0 bu. Maximum temperature, 84, minimum 50, precipitation 1.02, - in two showers.

Amarillo:

This week has seen the drouth effectively broken. Except for the wet spell we had the 2d week in May, this is the first moisture to amount to anything since the middle of last October. It has come in time to save the row crops and insure fair yields of these and of course is of immeasurable benefit to stock on the range. It has rained every day but one this week, and we are lucky in getting threshing on the dry-land project done as reported last week. Grain now standing in the shock on the station is sprouting badly. Weeds are now coming on in great shape and will give us some extra work as soon as the fields dry enough to get in them. Weather for the week was: maximum temperature: 93, minimum 60, hourly wind velocity 5.9 miles, precipitation 3.18", evaporation 1.747".

Small grain yields for the season.

Plats.	W.Wheat	S.Wheat	Oats	Barley
C.C.A-	6.5	1.7	0.9	1.3
B	7.5	3.8	2.5	0.6
D	10.3	3.5	4.4	0.8
E	9.5	1.2	0.9	0.4
F	7.3	2.0	7.8	2.7
G		1.7		
I		4.2		
K		2.3		
M		2.3		
O		2.3		

Plats	W.Wheat	S.Wheat	Oats	Barley
Rot.1		4.3	3.1	
2		3.0	2.8	
3		1.3	0.0	
4		3.0	1.3	
5		2.8	0.9	
6			1.3	0.2
7			0.9	2.9
8		1.0	1.9	
9		1.8	1.3	
20	5.8		0.9	
22	3.8		2.5	
24	4.2		3.1	
26	6.0		0.0	
28	7.7		0.9	
29		0.0	2.2	
30		1.8	1.9	
91	6.0		0.9	
93	3.2		1.6	
95	4.0		3.1	
97	6.3		1.6	
570		3.5		

Averages	1917--6.3	3.3	3.0	1.3
"	1916--4.6	3.6	3.7	1.3
"	1915--15.7	11.5	31.9	17.0

NOTE: These grains have been cleaned and tested and seed selections made for next season. W. Wheat tested 58#, S. Wheat 56#, Oats 30#, and Barley 35#. The relatively high yields of winter wheat in C. C. series over the rotations are to be accounted for from benefit from run-off water rather than from any difference due to tillage methods.

Archer:

Corn is still growing and has a good color. An abundance of ears is showing and they appear to be filling well. Oats is ripening, and will be ready to harvest in a few days. The plats have a good height and stand, and very little border growth is showing. The heads are well filled and a good yield is expected. The spring wheat will be ready for harvest in about a week. The plats are not so even in height as the oats, but most of them have a very good appearance, and promise a good yield. Deep samples on the spring wheat and oats plats show that there is very little moisture left in the upper two feet; but there is still a little below, and it varies considerable at different places on some of the plats. There is enough moisture in the summer fallow plats to make sampling a little sticky. All summer fallow plats were single disked this week. Most of the flax plats are looking good, but some of them are weedy. They are in much better condition than they would be if they had not been reseeded, as is shown by plats in a date of seeding test, which were not reseeded. The fall listed plat of flax was taken by weeds, and the weeds were mown on it last week. Temperatures: maximum 81-15th & 17th, minimum 46, means 75 & 48, precipitation, .05", evaporation, 1.067", wind velocity per hour 4.5 miles.

Ardmore:

Maximum temperature for the week, 93, minimum 50, total precipitation 1.66". During Friday afternoon, August 17th, we had a rain storm which lasted about fifteen minutes. During this time 1.66" rain fell. There was considerable hail, and of course practically all of the moisture was lost by run-off. The ground was packed very hard. Corn, cand and all forage crops suffered badly, and it is doubtful whether they will recover enough to make sufficient feed for the coming year. All small grain crops were in the shock, and a good percentage of this grain was beat out of the heads. This heavy down pour covered only a very small area of the country. In the town of Ardmore there was very little rain, and two miles north of us there was practically no rain at all.

Bellefourche(Report for week ending August 13)

Cool weather during the past week enabled the corn to recover from the effects of the hot weather. The corn is now tasseled out at an average height of about four and one half feet. All small grain except five plats of winter wheat is now harvested. The yield of wheat will be low but the grain is of fairly good quality. The continued dry weather has caused most of the water holes in the country north of Newell to dry up. Much of the range stock has been brought back to the project on account of the shortage of water. There is still plenty of feed on the dry land. Maximum temperature 81, minimum 39, precipitation 0.59 miles.

Bellefourche: (Report for week ending August 18)

All dry land plats except the winter wheat in the M.C. series were threshed during the week. Wheat and barley were of fairly good quality but the oats was very light. The highest yield of wheat was 12.62 bu. in rotation 5. The lowest was 2.0 bu. rotation 54. Average of all wheat plats was 7.4 bu. The highest yield of oats 38.6 bu. was obtained on rotation 19, the lowest 3.4 bu. was obtained on rotation 33. Average yield of all oats 16.8 bu. Barley H.M.C. series gave a yield of 28.1 bu. Barley A with 15.3 bu. gave the lowest yield. The average for all barley was 22.9 bu. A rain of 1.08" on the 18th moistened the ground enough to be of material help in plowing. This rain will carry the corn nearly to maturity. Fall plowing was commenced on the 18th. Maximum temperature 95, minimum 54, precipitation 1.08".

Big Springs:

The weather conditions still continue dry and the drouth remains unbroken. Maximum temperature for the week 101, minimum 66, wind velocity 8.2 miles, evaporation 2.97 inches, precipitation none. All crops are suffering for the want of moisture and our chances of producing a crop of any consequence grow less and less every day that passes by without rain. The work for the week has consisted of cultivating, hoeing weeds and watering shrubs and trees.

Colby:

This has been another wet week; 2.79" of water fell, bringing the total for the month thus far to 5.99". The field crops are recovering from the effect of the hail and are making good growth. If frost stays away till October there will be some corn as ears are coming on where the stalks were still green when the first rains came. The sorghums, the late, look promising. No field work was possible during the week. The job of the station at present is the digging of a pit silo, which will be the third silo on the place. Weather for the week: maximum temperature 82, minimum 58, precipitation 2.79".

Dalhart:

The weather continues cool with frequent showers 2.04" were recorded during the past week. This brings the total precipitation for August to 2.67" which is more than has been recorded during any previous month this year. This rain has had little or no effect on the earlier seeded crops that were "fireing" but has been very beneficial to the later plantings. The indications are that some of the crops will get high enough to cut with the row binder. Unless frost comes later than usual there will be no grain yields. The new cottage will be ready for the painters in about five days. The implement shed has been partly roofed. Maximum temperature for the week: 90, minimum 61, precipitation 2.04".

Garden City: (Report for the week ending August 11)

There were during the week, three showers which afforded relief from the high temperatures we have been having. On the 7th, 1.09" of precipitation fell, but it came down so rapidly that most of it ran off. All sorghum crops were much refreshed by the rains and are doing nicely. Freed's sorgo is maturing grain. The earlier planted milo is also heading. Fall plowing was begun the latter part of the week. The soil is very dry, and on most of the plats turns up in a clody condition. Maximum temp. 102, minimum 54, wind velocity (2') ane. 7.9-(8') ane. 11.9 mi. evaporation 2.26 inches, precipitation 1.38".

Huntley:

Harvest of spring wheat and flax was completed during the week and the D.L.A. oats were threshed. The maximum oat yield was 31.6 bu. on rot. 69, and the minimum 16.2 bu. on rot. 42. Average yield for all rotations and cultural methods 23.3 bu. per acre. The effects of the prolonged drought is beginning to be seen in the corn. Several plats, especially the spring plowed ones are firing in the center. Ears have set well but unless we have rain it is very doubtful if the grain will fill. Maximum for the week 95, minimum 36, precipitation, trace.

Judith Basin:

Dry weather still continues here, but in spite of the dryness, it appears that the spring wheat on the rotations will make a fair yield. The corn is about four feet high, and does not appear to be suffering from the drought. The spring wheat, which was planted where the winter wheat had killed out on the continuous cropping series, was cut for hay on the 15th, and the flax was har-

Judith Basin (continued)
vested on the same date. The latter was too short to cut with a binder, so a mower with a buncher attachment was used. Ornamental trees, especially the Canadian Poplars, are beginning to show the effects of the dry weather, and many of the leaves are turning yellow. Maximum temperature for week 88, minimum 47, precipitation, none, evaporation 1.695".

Lawton:

The weather has been quite favorable for the growth of the sorghum and cotton crops during the past week. The temperatures have been quite aggreeable and the wind velocity has been low. The latter part ofthe week was sultry and partly cloudy resulting in .60" of rain on the 17th, .85" on the 18th. Trace on the 19th and .57" on the 20th. A rather heavy wind accompanied the first rain and lodged the milo and some of the sorghums in the cooperative experiments badly. Most of the sorghums in the them has straightened up pretty well, but the milo will probably remain mostly on the ground. The other two rains came in an ideal manner. Run-off has been very light and the land that is being prepared for wheat will be greatly benefitted. We have been unable to do any field work since last Thursday. All sorghum crops on the station are considerably in advance of those in the surrounding country and the present rains will insure pretty good yields on all of the early and normal dates of planting. Four plats of red amber seeded on April 15th and May 1st were harvested on the 16th. Some of the Kaoliang, Freed sorgo and feterita are ripening rapidly. Cotton is fruiting quite heavily and I believe that the station crop will be heavier than last year. There is also some pretty good cotton throughout the country but much of it is very late and the stands are often very thin. It is noted that much of this late cotton has not made very much plant growth and is attempting to fruit. I hardly believe that good yields can be expected under these conditions. Should rains continue it is possible that some hay will be cut in September; this however, is not a very safe prediction. Birds are causing severe damage to the kafir crops on the station, especially on the permanent rotations.

Mandan:

In order to secure trees for a thorough stock experiment, all varieties of stone fruits that are at all promising for this region were budded on the native plum, sand cherry, and choke cherry. Pear varieties were budded on Crataegus and Juneberry. Apple varieties were worked on Pyrus baccata. Several Hibernal apple trees and the first two rows of apple trees on the hillside were top-worked to more desirable varieties. A precipitation of 33" on the 16th was accompanied by considerable hail which did some damage to corn and garden crops. This rain, together with .46" on the 17th assures ample moisture for the maturing of corn and late vegetable crops.

Mr. H. O. Werner, of the North Dakota Agricultural College, and Mr. H. N. Bigger, of the Office of Corn Investigations, were visitors on the station this week. Mr. Parker who is working with Dr. Humphrey, of the Cereal Office, in a rust survey called today.

Total precipitation .81", maximum temperature 96, minimum 44.

North Platte:

During the week there has been several days of cloudyweather. The total amount of precipitation has been .29". Temperatures have been rather low. These conditions have been favorable for corn but more rain is needed badly.

North Platte: (continued)

The following table gives yields secured in the dates of seeding test of spring grains for this year.

	Seeding dates.							
	3/27	4/9	4/21	5/5	3/27	4/9	4/21	5/5
	lbs. per acre				bushels per acre			
Wheat	902	803	468	330	15.3	13.4	7.8	5.5
Oats	1170	690	478	424	36.5	21.6	21.3	13.2
Barley	1716	1578	1013	528	35.7	32.8	21.1	15.2
Emmer	422	138	70	46	10.5	3.4	1.8	1.1
Oats	1082	680			33.8	21.2		

Scottsbluff:

The week has been a continuation of the dry weather and moderate in temperature. Corn is suffering seriously from lack of moisture and the lower leaves are beginning to turn. Sorghum and beans, however, are looking fairly good considering the unfavorable conditions. Winter wheat, spring wheat, barley and a few plats of oats were threshed. The yields of spring and winter wheat are a little above normal but those of barley are below normal. Following is a table showing the maximum, minimum and average yields per acre obtained this year.

Crop	Yield Maximum	Yield Minimum	Yield Average
Winter wheat	20.0 bu.	15.8 bu.	18.9 bu.
Spring wheat	20.2 "	7.0 "	15.6 "
Barley	28.7 "	5.2 "	15.3 "

Maximum temperature 88, minimum temperature 45, precipitation, trace, evaporation 1.562", average hourly wind velocity 3.3 miles.

Sheridan:

Another absolutely dry week has passed, and threshing has been in progress all of the week. The rotation threshing of winter and spring wheat, oats and barley were finished this morning, and the Cereal office threshing has been done. Yields of all crops were low. Barley averaged about 17 bushels, spring wheat 7.5, oats 25 and winter wheat 10. These averages are only approximate as the yield calculations have not been completed. In the spring wheat fully half of the heads were empty, with an apparent normal development. I have been unable to find the cause of this dondition, No joint worm could be found. Oats were very light and it was with difficulty that we were able to clean and save them. Corn is in the roasting ear stage and doing nicely. Flax will be ready to cut in a day or two. Weather conditions for the past week have been as follows: max. temp. 95, min. 43, precip. 0, evap. 1.628" and wind velocity 3.8 miles.

Woodward:

The past week has been cool, cloudy and wet. We have had excellent growing conditions and the crops have responded wonderfully. Some of the crops that looked as if they would not recover at all have come out of the burned condition so much that one in passing the field cannot recognize it as being the same. The burned leaves have nearly all shed and the plants have made such a growth that a good yield will yet be secured. The red amber cane that is planted on the M.C. plats has made 18" growth in the last week. It was so far gone before the rains that come of it was falling over. The reason this crop suffered so much was that it was so much thicker than the other crops. Where it was thinned

Woodward: (continued)
to about 4" it has matured a crop that will make a good yield and has been harvested, This however is earlier planting of the of the Cereal work. The plats are getting pretty weedy since the wood and they are so wet that we can not get on to them to work. It has been too wet to harvest the broom corn but if it does not rain any more before Monday we can harvest it then. We will have plenty of feed for the winter unless something unexpected happens. There will be plenty of forage and it is probably that the later planting will make a good yield of grain as well as forage. The earlier planting will make a fiar crop of grain. Most of it is headed out at this time and is filling in good shape. The sparrows are giving us a great deal of trouble in the headed grain. We have put out poison for them and are shooting them as fast as we can. Weather report : Maximum temperature 94, minimum temperature, average hourly wind velocity 4.3 miles, evaporation 1.019", precipitation 2.40".

WEEKLY STATION REPORTS

of the office of

DRY LAND AGRICULTURE INVESTIGATIONS

Bureau of Plant Industry

U. S. Department of Agriculture

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REPORT FOR THE WEEK ENDING AUGUST 18, 1917.

Akron:

The past week has been comparatively cool with high humidity. The spring wheat and a part of the winter wheat on the rotations were threshed during the week. Spring wheat yields varied from 8.7 bu. on rot. 58, to 20.8 bu. on rot. 32. Spring wheat on summer fallow averaged 16.0 bu. Maximum temperature, 84, minimum 50, precipitation 1.02, - in two showers.

Amarillo:

This week has seen the drouth effectively broken. Except for the wet spell we had the 2d week in May, this is the first moisture to amount to anything since the middle of last October. It has come in time to save the row crops and insure fair yields of these and of course is of immeasurable benefit to stock on the range. It has rained every day but one this week, and we are lucky in getting threshing on the dry-land project done as reported last week. Grain now standing in the shock on the station is sprouting badly. Weeds are now coming on in great shape and will give us some extra work as soon as the fields dry enough to get in them. Weather for the week was: maximum temperature: 93, minimum 60, hourly wind velocity 5.9 miles, precipitation 3.18", evaporation 1.747".

Small grain yields for the season.

Plats.	W.Wheat	S.Wheat	Oats	Barley
C.C.A-	6.5	1.7	0.9	1.3
B	7.5	3.8	2.5	0.6
D	10.3	3.5	4.4.	0.8
E	9.5	1.2	0.9	0.4
F	7.3	2.0	7.8	2.7
G		1.7		
I		4.2		
K		2.3		
M		2.3		
O		2.3		

Plats	W.Wheat	S.Wheat	Oats	Barley
Rot.1		4.3	3.1	
2		3.0	2.8	
3		1.3	0.0	
4		3.0	1.3	
5		2.8	0.9	
6			1.3	0.2
7			0.9	2.9
8		1.0	1.9	
[illegible]		1.8	1.3	
20	5.8		0.9	
22	3.8		2.5	
24	4.2		3.1	
26	6.0		0.0	
28	7.7		0.9	
29		0.0	2.2	
30		1.8	1.9	
91	6.0		0.9	
93	3.2		1.8	
95	4.0		3.1	
97	6.3		1.3	
570		3.5		

Averages	1917--6.3	3.3	3.0	1.3
"	1916--4.6	3.6	7.7	1.3
"	1915--15.7	11.3	31.9	17.0

NOTE: These grains have been cleaned and tested and seed selections made for next season. W. Wheat tested 58#, S. Wheat 56#, Oats 30#, and Barley 35#. The relatively high yields of winter wheat in C. C. series over the rotations are to be accounted for from benefit from run-off water rather than from any difference due to tillage methods.

Archer:

Corn is still growing and has a good color. An abundance of ears is showing and they appear to be filling well. Oats is ripening, and will be ready to harvest in a few days. The plats have a good height and stand, and very little border growth is showing. The heads are well filled and a good yield is expected. The spring wheat will be ready for harvest in about a week. The plats are not so even in height as the oats, but most of them have a very good appearance, and promise a good yield. Deep samples on the spring wheat and oats plats show that there is very little moisture left in the upper two feet; but there is still a little below, and it varies considerable at different places on some of the plats. There is enough moisture in the summer fallow plats to make sampling a little sticky. All summer fallow plats were single disked this week. Most of the flax plats are looking good, but some of them are weedy. They are in much better condition than they would be if they had not been reseeded, as is shown by plats in a date of seeding test, which were not reseeded. The fall listed plat of flax was taken by weeds, and the weeds were mown on it last week. Temperatures: maximum 81-15th & 17th, minimum 46, means 75 & 48, precipitation, .05", evaporation, 1.067", wind velocity per hour 4.5 miles.

Ardmore:

Maximum temperature for the week, 93, minimum 50, total precipitation 1.66". During Friday afternoon, August 17th, we had a rain storm which lasted about fifteen minutes. During this time 1.66" rain fell. There was considerable hail, and of course practically all of the moisture was lost by run-off. The ground was packed very hard. Corn, cand and all forage crops suffered badly, and it is doubtful whether they will recover enough to make sufficient feed for the coming year. All small grain crops were in the shock, and a good percentage of this grain was beat out of the heads. This heavy down pour covered only a very small area of the country. In the town of Ardmore there was very little rain, and two miles north of us there was practically no rain at all.

Bellefourche (Report for week ending August 13)

Cool weather during the past week enabled the corn to recover from the effects of the hot weather. The corn is now tasseled out at an average height of about four and one half feet. All small grain except five plats of winter wheat is now harvested. The yield of wheat will be low but the grain is of fairly good quality. The continued dry weather has caused most of the water holes in the country north of Newell to dry up. Much of the range stock has been brought back to the project on account of the shortage of water. There is still plenty of feed on the dry land. Maximum temperature 81, minimum 39, precipitation 0.59 miles.

Bellefourche: (Report for week ending August 18)

All dry land plats except the winter wheat in the H.C. series were threshed during the week. Wheat and barley were of fairly good quality but the oats was very light. The highest yield of wheat was 12.62 bu. in rotation 5. The lowest was 2.0 bu. rotation 34. Average of all wheat plats was 7.4 bu. The highest yield of oats 28.6 bu. was obtained on rotation 19, the lowest 3.4 bu. was obtained on rotation 33. Average yield of all oats 16.8 bu. Barley H.M.C. series gave a yield of 28.1 bu. Barley A with 15.3 bu. gave the lowest yield. The average for all barley was 22.9 bu. A rain of 1.08" on the 18th moistened the ground enough to be of material help in plowing. This rain will carry the corn nearly to maturity. Fall plowing was commenced on the 18th. Maximum temperature 95, minimum 54, precipitation 1.08".

Big Springs:

The weather conditions still continue dry and the drouth remains unbroken. Maximum temperature for the week 101, minimum 66, wind velocity 8.2 miles, evaporation 2.97 inches; precipitation none. All crops are suffering for the want of moisture and our chances of producing a crop of any consequence grow less and less every day that passes by without rain. The work for the week has consisted of cultivating, hoeing weeds and watering shrubs and trees.

Colby:

This has been another wet week; 2.79" of water fell, bringing the total for the month thus far to 5.99". The field crops are recovering from the effect of the hail and are making good growth. If frost stays away till October there will be some corn as ears are coming on where the stalks were still green when the first rains came. The sorghums, the late, look promising. No field work was possible during the week. The job of the station at present is the digging of a pit silo, which will be the third silo on the place. Weather for the week: maximum temperature 82, minimum 58, precipitation 2.79".

Dalhart:

The weather continues cool with frequent showers 2.04" were recorded during the past week. This brings the total precipitation for August to 2.67" which is more than has been recorded during any previous month this year. This rain has had little or no effect on the earlier seeded crops that were "fireing" but has been very beneficial to the later plantings. The indications are that some of the crops will get high enough to cut with the row binder. Unless frost comes later than usual there will be no grain yields. The new cottage will be ready for the painters in about five days. The implement shed has been partly roofed. Maximum temperature for the week: 90, minimum 61, precipitation 2.04".

Garden City: (Report for the week ending August 11)

There were during the week, three showers which afforded relief from the high temperatures we have been having. On the 7th, 1.09" of precipitation fell, but it came down so rapidly that most of it ran off. All sorghum crops were much refreshed by the rains and are doing nicely. Freed's sorgo is maturing grain. The earlier planted milo is also heading. Fall plowing was begun the latter part of the week. The soil is very dry, and on most of the plats turns up in a clody condition. Maximum temp. 102, minimum 54, wind velocity (2') ane. 7.9-(8') ane. 11.9 mi. evaporation 2.26 inches, precipitation 1.38".

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Harvest of spring wheat and flax was completed during the week and the D.L.A. oats were threshed. The maximum oat yield was 31.6 bu. on rot. 69, and the minimum 16.2 bu. on rot. 42. Average yield for all rotations and cultural methods 23.3 bu. per acre. The effects of the prolonged drought is beginning to be seen in the corn. Several plats, especially the spring plowed ones are firing in the center. Ears have set well but unless we have rain it is very doubtful if the grain will fill. Maximum for the week 95, minimum 36, precipitation, trace.

Judith Basin:

Dry weather still continues here, but in spite of the dryness, it appears that the spring wheat on the rotations will make a fair yield. The corn is about four feet high, and does not appear to be suffering from the drought. The spring wheat, which was planted where the winter wheat had killed out on the continuous cropping series, was cut for hay on the 15th, and the flax was har-

Judith Basin (continued)

vested on the same date. The latter was too short to cut with a binder, so a mower with a buncher attachment was used. Ornamental trees, especially the Canadian Poplars, are beginning to show the effects of the dry weather, and many of the leaves are turning yellow. Maximum temperature for week 88, minimum 47, precipitation, none, evaporation 1.695".

Lawton:

The weather has been quite favorable for the growth of the sorghum and cotton crops during the past week. The temperatures have been quite aggreeable and the wind velocity has been low. The latter part ofthe week was sultry and partly cloudy resulting in .60" of rain on the 17th, .85" on the 18th. Trace on the 19th and .57" on the 20th. A rather heavy wind accompanied the first rain and lodged the milo and some of the sorghums in the cooperative experiments badly. Most of the sorghums in the them has straightened up pretty well, but the milo will probably remain mostly on the ground. The other two rains came in an ideal manner. Run-off has been very light and the land that is being prepared for wheat will be greatly benefitted. We have been unable to do any field work since last Thursday. All sorghum crops on the station are considerably in advance of those in the surrounding country and the present rains will insure pretty good yields on all of the early and normal dates of planting. Four plats of red amber seeded on April 15th and May 1st were harvested on the 16th. Some of the Kaoliang, Freed sorgo and feterita are ripening rapidly. Cotton is fruiting quite heavily and I believe that the station crop will be heavier than last year. There is also some pretty good cotton throughout the country but much of it is very late and the stands are often very thin. It is noted that much of this late cotton has not made very much plant growth and is attempting to fruit. I hardly believe that good yields can be expected under these conditions. Should rains continue it is possible that some hay will be cut in September; this however, is not a very safe prediction. Birds are causing severe damage to the kafir crops on the station, especially on the permanent rotations.

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Total precipitation .81", maximum temperature 96, minimum 44.

North Platte:

During the week there has been several days of cloudyweather. The total amount of precipitation has been .29". Temperatures have been rather low. These conditions have been favorable for corn but more rain is needed badly.

North Platte: (continued)

The following table gives yields secured in the dates of seeding test of spring grains for this year.

	Seeding dates.							
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Maximum temperature 88, minimum temperature 45, precipitation, trace, evaporation 1.562", average hourly wind velocity 3.3 miles.

Sheridan:

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Woodward:

The past week has been cool, cloudy and wet. We have had excellent growing conditions and the crops have responded wonderfully. Some of the crops that looked as if they would not recover at all have come out of the burned condition so much that one in passing the field cannot recognize it as being the same. The burned leaves have nearly all shed and the plants have made such a growth that a good yield will yet be secured. The red amber cane that is planted on the M.C. plats has made 18" growth in the last week. It was so far gone before the rains that come of it was falling over. The reason this crop suffered so much was that it was so much thicker than the other crops. Where it was thinned

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